

	City of Casa Grande Development Center Policies & Procedures	Effective Date: February 2, 2015
	Title: Commercial Building Plan Submittal Requirements	Date Reviewed: September 4, 2015
		Department of Primary Responsibility: Building Safety
		Policy Number: B - PR - 001 - 2015

The requirements in this document are a guide and are NOT all inclusive as your design will dictate the plan details required to show codes compliance of your structure. The City does a plan review to check for code compliance before issuing a building permit. During the planning stages of a project, we sometimes have several meetings with owners and the design team to discuss code issues and answer questions. After the design is finalized the City does a plan review that, to the best of our ability, identifies code issues to be corrected before the permit is issued and construction starts on the structure.

All plans submitted for review shall have digital copies attached. Minor residential permits may have this requirement waved by the Building Official.

Resubmissions of revised drawings per City comments shall be one complete submission. The applicant may either submit new complete sets of drawings or the corrected pages. IF submitting only the corrected pages applicant must remove and replace these pages in City offices. The city WILL NOT replace pages in ANY plan set. A complete digital copy of the final City Reviewed Plans is to be submitted before the permit is picked up.

Design Professional Required.

The City requires all building plans and their mechanical, electrical, plumbing, fuel gas, or fire protection systems to be prepared by a design professional. The design professional shall be registered under ARS Title 32 and shall affix his official seal and signature to said drawings and specifications for all occupancies.

Arizona Law does have exceptions to licensing requirements. See ARS 32-144.

Commercial Plan Requirements:

- 1) **Building Permit Application that is completely filled out, including the completeness checklist and any other required documentation and applications.**
- 2) **Energy Code Compliance Documentation**
- 3) **Commercial Building Plans (2 paper and 1 digital) that include:**
 - A) **Title Page: must contain all of the following information:**
 - i) Design Codes
 - ii) Building Occupancy classification(s)
 - iii) Building Construction Type
 - iv) Building square footage (gross and each individual occupancy classification)
 - v) Building height
 - vi) Occupant Load. (By each occupancy classification (room by room) and total load)
 - vii) Fire Sprinklered / Unsprinklered
 - viii) Allowable building area including area increases if used, with your calculations
 - ix) Water Service information to include: number of meters, meter size(s), and service line size(s).
 - x) Amp rating of electrical service
 - xi) Correct complete plan page index
 - xii) List all required Special Inspections per IBC Chapter 17 (There is another Special Inspections Document that provides the additional information required in Chapter 17)
 - B) **Site Plan:** (Copy of the Final Development Plan)
 - i) Lot dimensions
 - ii) Building footprint with all projections & dimensions to all property lines and/or other buildings
 - iii) Accessible route from the building to parking and to the public way
 - iv) North arrow
 - v) Building Setbacks, Easements, etc.
 - vi) All parking
 - C) **Foundation Plan:**
 - i) Footings, foundations, piers, and grade beams

- ii) Post and girder intersections
- iii) Include are required re-enforcing, bar sizes, clearances, support, etc.
- D) **Floor Plans that must include:**
 - i) Complete architectural plans, fully dimensioned and labeled
 - ii) Exit plan for each level detailing exiting occupant load, exit path, travel distances, door types & swing, and total distance to the exit discharge
 - iii) Accessibility requirements for accessible route, doors, toilet rooms, fixtures, etc. as required for your structure
- E) **Exterior Elevations:**
 - i) Identify finish materials to be used, flashing, supports, etc.
- F) **Structural and Architectural Details:**
 - i) Structural design assumptions and any modifications/reductions taken including calculations
 - ii) Roof, to include eaves, overhangs, rake and gables
 - iii) Floor changes (i.e. slab-to-access floor)
 - iv) Handrails, guardrails, and support details
 - v) Structural framing details
 - vi) Fire walls, fire barriers, fire partitions, smoke walls/partitions, fire wall penetration assemblies, and head-of-wall assemblies. Include details showing the testing agency, listing number, and construction details for each assembly. (These may be on a separate detail sheet.)
 - vii) Suspended ceiling plan with support details
 - viii) Structural section with details at foundation, floor and roof levels
 - ix) Typical cross section in each direction
 - x) Detail the required special inspections per 2012 IBC Chapter 17. Provide third party testing agency information on the required separate forms.
- G) **Engineered structural system:** Provide manufacturer's Specifications, calculations, drawings and installation instructions for any Prefabricated Roof and Floor Trusses, pre-engineered structures or components - Signed and Sealed by the PE that designed them.
- H) **HVAC Plan to include all applicable:**
 - i) Location of HVAC Equipment
 - ii) Duct location and layout for supply and return air
 - iii) Smoke/fire damper locations
 - iv) Smoke detectors if required
 - v) Supply and return CFM's of all HVAC units
 - vi) IMC type of occupancy(s), number of occupants, and CFM's of ventilation and exhaust provided per IMC Chapters 4 and 5
 - vii) Gas line riser drawing, showing pipe sizes, gas pressure, developed lengths, etc., and including input rating in BTU's of all equipment
- I) **Plumbing Plan:** (to include the pipe sizes and proposed layout of all supply and drainage piping)
 - i) Show all water heaters
 - ii) Sewer connection location
 - iii) Grease, oil, sand interceptors and sizing calculations
 - iv) Location and type of back-flow prevention devices
 - v) Roof drains location, size and area served
 - vi) Riser diagrams
 - vii) Gas line riser drawing, showing pipe sizes, gas pressure, developed lengths, etc., and including input rating in BTU's of all equipment
- J) **Electrical Plan:**
 - i) Panel size(s) and location(s). Include a single line riser diagram with wire/conduit sizes
 - ii) Transformer locations and sizes
 - iii) Outlet layout and circuiting
 - iv) Lighting layout to include exit lighting, emergency lighting, switching layout, and circuiting
 - v) Detail locations of ground fault and arc-fault outlets on the plans
 - vi) Locations of telephone, data, fire-alarm, security, etc. outlets
- K) **Solar Systems (PV and Water Heaters):** See Solar System requirements in a separate document

Fire Alarm and Fire Sprinkler System Plan Requirements

While the detailed plans for these systems are usually deferred some minimum information is required on the building plan set. Such as the location of:

- i) the fire riser room
- ii) the fire alarm panel(s)
- iii) basic information on location of devices, piping, and wiring methods